

Services Operations Management - Web course

COURSE OUTLINE

1. Understanding the nature of services.
2. Aligning service strategy and service competitiveness.
3. Service design, development & automation.
4. Managing human resource in services.
5. Service quality.
6. Service facility design and facility location.
7. Demand management in services.
8. Capacity management or supply management in services.
9. Managing waiting lines & queuing models.
10. Service inventory and supply chain management.
11. Quantitative models in managing service operations.

COURSE DETAIL

Module Number	Title	Lecture No.	Lectures per module
1	Understanding The Nature Of Services	1	Lecture 1- Introduction and imperatives of services
		2	Lecture 2 - Nature and characteristics of services
		3	Lecture 3 - Classification of services and analyzing service operations
2	Aligning Service Strategy And Service Competitiveness	4	Lecture 1- Introduction to Service Strategy
		5	Lecture 2 - Competitive Service Strategies
		6	Lecture 3 - Strategic Service Vision
3	Service Design, Development & Automation	7	Lecture 1 - New service design and development
		8	Lecture 2 - Service system design and delivery process
		9	Lecture 3 - Technology & automation in services
		10	Lecture 4 - Service encounter
4	Managing Human Resources In Services	11	Lecture 1 - Human resource planning & employee selection
		12	Lecture 2 - Managing people in Services organization
		13	Lecture 3 - Work measurement in Services
		14	Lecture 1 - Defining Service Quality



NP-TEL

NPTEL

<http://nptel.iitm.ac.in>

Management

Pre-requisites:

1. Operations Management.
2. Fundamentals of Operations Research.

Additional Reading:

1. Heskett, J.L. (1991), "Lessons in the service sector" in The Service Management Course: Cases & Reading, Free Press, 47-64
2. Johnston, R. (2005), "Service operations management: from the roots up" International Journal of Operations & Production Management, 25, 12, 1298-1308.

Hyperlinks:

1. www.decisionsciences.org/DecisionLine/Vol35/35_2/35_2books.pdf
2. [doi:10.1016/j.jom.2006.04.005](https://doi.org/10.1016/j.jom.2006.04.005) for an article on "Service Operations Management research" by Jose A.D. Machuca, María del Mar González-Zamora and Víctor G. Aguilar-Escobar.

Coordinators:

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5	Service Quality	15	Lecture 2 - Quality Service by Design
		16	Lecture 3 - Service process control
		17	Lecture 4 - Total quality management tools
		18	Lecture 5 - Quality philosophy and performance excellence
		19	Lecture 6 - Service recovery and Service guarantee
6	Service Facility Design And Facility Location	20	Lecture 1 - Service facility design
		21	Lecture 2 - Process analysis of facility layouts
		22	Lecture 3 - Facility location decision factors
		23	Lecture 4 - Quantitative models for facility location: Service facility on a line or on a plane
		24	Lecture 5 - Quantitative models for facility location: Based on different objective functions of optimization criteria
25	Lecture 6 - Quantitative models for multiple service facilities		
7	Demand Management In Services	26	Lecture 1 - Forecasting Demand In Services
		27	Lecture 2 - Smoothing Customer Demand In Services
8	Capacity Management Or Supply Management In Services	28	Lecture 1 - Service Capacity Management
		29	Lecture 2 - Yield management
		30	Lecture 3 - Resource and Workforce Scheduling in Services
9	Managing Waiting Lines & Queuing Models	31	Lecture 1 - Introduction to Queuing System
		32	Lecture 2 - Characteristics of Queuing system
		33	Lecture 3 - Queuing Models
		34	Lecture 4 - Queuing Models
10	Service Inventory and Supply Chain Management	35	Lecture 1 - Service Inventory Management
		36	Lecture 2 - Service Supply Chains
		37	Lecture 3 - Processes in Service Supply Chain
		38	Lecture 1 - Data Envelopment Analysis 1

11	Quantitative Models In Managing Service Operations	39	Lecture 2 - Data Envelopment Analysis 2
		40	Lecture 3 - Application of simulation in service operations management
		41	Lecture 4 - Vehicle routing and scheduling

References:

1. B. Fitzsimmons, James A., and Mona J. Fitzsimmons, Service Management: Operations, Strategy, and Information Technology, 6th Ed., Irwin/McGraw-Hill, 2007.
2. C. Haksever, Render B., Russel S. R. and Murdick R. G., Service Management and Operations, 2nd Ed., Prentice Hall, 2007.